

WHAT IS CLAIMED:

1           1. A method for use in wireless equipment, the method comprising the steps of:  
2           receiving user channel transmit power information from base stations involved in a  
3           soft handoff with user equipment; and  
4           receiving information from the user equipment;  
5           wherein the wireless equipment determines a reference user transmit power level  
6           for use by the base stations as a function of the received user channel transmit power  
7           information and the received information from the user equipment.

1           2. The method of claim 1 wherein the received information from the user  
2           equipment comprises at least one parameter that is a function of a measured signal-to-  
3           noise ratio in the user equipment.

1           3. The method of claim 1 wherein the received information from the user  
2           equipment comprises a value representative of an excess signal-to-noise ratio determined  
3           as a function of a target signal-to-noise ratio value and a signal-to-noise ratio associated  
4           with a received user channel transmit power signal that is stronger than at least some of  
5           the base stations.

1           4. A method for use in wireless equipment, the method comprising the steps of:  
2           receiving user channel transmit power information from base stations involved in a  
3           soft handoff with user equipment; and  
4           receiving information from the user equipment, wherein the information comprises  
5           an identifier of that base station with a received signal at the user equipment stronger than  
6           other base stations and a signal-to-noise ratio value associated with the identified base  
7           station;  
8           determining a downlink reference power from the received user channel transmit  
9           power information and the received information from the user equipment; and  
10          transmitting the determined downlink reference power to the base stations.

1           5. A method of claim 4 wherein the signal-to-noise ratio value represents an excess

2 signal to noise ratio value determined as a function of a target signal-to-noise ratio value  
3 and a signal-to-noise ratio value associated with the identified base station.

1 6. A method for use in wireless equipment during a soft handoff with a number of  
2 base stations, the method comprising the steps of:

3 identifying that base station with a received signal at the wireless equipment  
4 stronger than other base stations; and

5 calculating a signal-to-noise ratio value associated with the identified base station;  
6 and

7 transmitting the identify of the identified base station and the calculated signal-to-  
8 noise ratio to a control point of a wireless system.

1 7. The method of claim 6 wherein the control point is a common control point.

1 8. The method of claim 6 wherein the calculated signal-to-noise ratio value  
2 represents an excess signal to noise ratio value determined as a function of a target signal-  
3 to-noise ratio value and a signal-to-noise ratio value associated with the received signal  
4 from the identified base station.

1 9. Apparatus for use in wireless equipment, the apparatus comprising:

2 a receiver for receiving user channel transmit power information from base stations  
3 involved in a soft handoff with user equipment, and receiving information from the user  
4 equipment; and

5 a processor for determining a reference user transmit power level for use by the  
6 base stations as a function of the received user channel transmit power information and the  
7 received information from the user equipment.

1 10. The apparatus of claim 9 wherein the received information from the user  
2 equipment comprises at least one parameter that is a function of a measured signal-to-  
3 noise ratio in the user equipment.

1 11. The apparatus of claim 9 wherein the received information from the user  
2 equipment comprises a value representative of an excess signal-to-noise ratio determined

as a function of a target signal-to-noise ratio value and a signal-to-noise ratio associated with a received user channel transmit power signal that is stronger than at least some of the base stations.

12. Apparatus for use in wireless equipment, the apparatus comprising:  
a transceiver for (a) receiving user channel transmit power information from base stations involved in a soft handoff with user equipment, (b) receiving information from the user equipment, wherein the information comprises an identifier of that base station with a received signal at the user equipment stronger than other base stations and a signal-to-noise ratio value associated with the identified base station, (c) transmitting a downlink reference power to the base stations; and  
a processor for use in determining the downlink reference power from the received user channel transmit power information and the received information from the user equipment.

13. The apparatus of claim 12 wherein the signal-to-noise ratio value represents an excess signal to noise ratio value determined as a function of a target signal-to-noise ratio value and a signal-to-noise ratio value associated with the identified base station.

14. Apparatus for use in wireless equipment during a soft handoff with a number of base stations, the apparatus comprising:  
a processor for use in (a) identifying that base station with a received signal at the wireless equipment stronger than other base stations, and (b) calculating a signal-to-noise ratio value associated with the identified base station; and  
a transmitter for transmitting the identify of the identified base station and the calculated signal-to-noise ratio to a control point of a wireless system.

15. The apparatus of claim 14 wherein the control point is a common control point.

16. The apparatus of claim 14 wherein the calculated signal-to-noise ratio value represents an excess signal to noise ratio value determined as a function of a target signal-

to-noise ratio value and a signal-to-noise ratio value associated with the received signal from the identified base station.

17. A transmission frame representing data embodied in a wireless transmission signal, the transmission frame comprising:

a first portion of a field comprising at least one bit for conveying data representative of an identifier for identifying a base station whose received signal at a user equipment is stronger than other received signals from other base stations at the user equipment; and

a second portion of the field comprising at least one bit for conveying data representative of a value associated with a signal-to-noise measure of the received signal from the identified base station at the user equipment.

18. The transmission frame of claim 17 wherein the transmission frame is conveyed via a radio resource control based protocol.

19. The transmission frame of claim 17 wherein the transmission frame is conveyed via physical layer signaling.